CRF Error Corrected by th STIC Systems Branch

Serial Number: 10/089,058

ENTERED

PCT/10

CRF Processing Date: 1/12/2002
Edited by: _____
Verified by: _____ (STIC staff)

- [ ] Changed a file from non-ASCII to ASCII
- [ ] Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- [ ] Edited a format error in the Current Application Data section, specifically:
  _____
- [ ] Edited the Current Application Data section with the actual current number. The number inputted by the applicant was [ ] the prior application data; or [ ] other _____.
- [ ] Added the mandatory heading and subheadings for "Current Application Data".
- [ ] Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- [ ] Changed the spelling of a mandatory field (the headings or subheadings), specifically:
  _____
- [ ] Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
  _____
- [ ] Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
  _____
- [ ] Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- [ ] Inserted colons after headings/subheadings. Headings edited included:
  _____
- [ ] Deleted extra, invalid, headings used by an applicant, specifically:
  _____
- [x] Deleted: [ ] non-ASCII "garbage" at the beginning/end of files; [ ] secretary initials/filename at end of file; [ ] page numbers throughout text; [ ] other invalid text, such as_____.
- [ ] Inserted mandatory headings, specifically: _____
- [ ] Corrected an obvious error in the response, specifically:
  _____
- [ ] Edited identifiers where upper case is used but lower case is required, or vice versa.
- [ ] Corrected an error in the Number of Sequences field, specifically:
  _____
- [ ] A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- [ ] Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- [ ] Other:
  _____
  _____
  _____

*Examiner: The abov corrections must b communicated to th applicant in the first Office Action. DO NOT s nd a copy of this form.

3/1/95

PCT10

RAW SEQUENCE LISTING   DATE: 11/12/2002
PATENT APPLICATION: US/10/089,058   TIME: 18:20:44

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\11122002\J089058.raw

```
    5 <110> APPLICANT: BRAUN, Curtis
    6        PURAC, Admir
    7        BORGFORD, Thor
    9 <120> TITLE OF INVENTION: Improved Ricin-Like Toxins for Treatment of Cancer
   12 <130> FILE REFERENCE: 10447-22
   15 <140> CURRENT APPLICATION NUMBER: US 10/089,058
C--> 17 <141> CURRENT FILING DATE: 2002-11-05
   21 <150> PRIOR APPLICATION NUMBER: US 60/197,409
   23 <151> PRIOR FILING DATE: 2000-04-14
   27 <150> PRIOR APPLICATION NUMBER: US 60/157,807
   29 <151> PRIOR FILING DATE: 1999-10-04
   33 <160> NUMBER OF SEQ ID NOS: 130
   37 <170> SOFTWARE: PatentIn version 3.1
   41 <210> SEQ ID NO: 1
   43 <211> LENGTH: 30
   45 <212> TYPE: DNA
   47 <213> ORGANISM: Artificial Sequence
   51 <220> FEATURE:
   53 <223> OTHER INFORMATION: primer 301-3'
   55 <400> SEQUENCE: 1
   56 atgtggggac aacgaaattt taatgctgat                              30
   59 <210> SEQ ID NO: 2
   61 <211> LENGTH: 105
   63 <212> TYPE: DNA
   65 <213> ORGANISM: Ricinus communis
   69 <400> SEQUENCE: 2
   70 ctcatggtgt atagatgcgc acctccacca tcgtcacagt tttctttgct tataaggcca   60
   72 gtggtaccaa attttaatgc tgatgtttgt atggatcctg agccc                  105
   75 <210> SEQ ID NO: 3
   77 <211> LENGTH: 30
   79 <212> TYPE: DNA
   81 <213> ORGANISM: Artificial Sequence
   85 <220> FEATURE:
   87 <223> OTHER INFORMATION: primer 301-5'
   89 <400> SEQUENCE: 3
   90 gccaagagga ccaaactgtg acgatggtgg                              30
   93 <210> SEQ ID NO: 4
   95 <211> LENGTH: 69
   97 <212> TYPE: DNA
   99 <213> ORGANISM: Artificial Sequence
  103 <220> FEATURE:
  105 <223> OTHER INFORMATION: pAP301 (MMP-9) linker
  107 <400> SEQUENCE: 4
```

RAW SEQUENCE LISTING   DATE: 11/12/2002
PATENT APPLICATION: US/10/089,058   TIME: 18:20:44

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\11122002\J089058.raw**

```
108 gcacctccac catcgtcaca gtttggtcct cttggcatgt ggggacaacg aaattttaat    60
110 gctgatgtt                                                           69
113 <210> SEQ ID NO: 5
115 <211> LENGTH: 1855
117 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
125 <223> OTHER INFORMATION: pAP301
127 <400> SEQUENCE: 5
128 gaattcatga aaccgggagg aaatactatt gtaatatgga tgtatgcagt ggcaacatgg    60
130 ctttgttttg gatccacctc agggtggtct ttcacattag aggataacaa catattcccc   120
132 aaacaatacc caattataaa ctttaccaca gcgggtgcca ctgtgcaaag ctacacaaac   180
134 tttatcagag ctgttcgcgg tcgtttaaca actggagctg atgtgagaca tgaaatacca   240
136 gtgttgccaa acagagttgg tttgcctata aaccaacggt ttattttagt tgaactctca   300
138 aatcatgcag agctttctgt tacattagcg ctggatgtca ccaatgcata tgtggtcggc   360
140 taccgtgctg aaatagcgc atatttcttt catcctgaca atcaggaaga tgcagaagca   420
142 atcactcatc ttttcactga tgttcaaaat cgatatacat tcgcctttgg tggtaattat   480
144 gatagacttg aacaacttgc tggtaatctg agagaaaata tcgagttggg aaatggtcca   540
146 ctagaggagg ctatctcagc gctttattat tacagtactg gtggcactca gcttccaact   600
148 ctggctcgtt cctttataat ttgcatccaa atgatttcag aagcagcaag attccaatat   660
150 attgagggag aaatgcgcac gagaattagg tacaaccgga gatctgcacc agatcctagc   720
152 gtaattacac ttgagaatag ttggggggaga ctttccactg caattcaaga gtctaaccaa   780
154 ggagcctttg ctagtccaat tcaactgcaa agacgtaatg gttccaaatt cagtgtgtac   840
156 gatgtgagta tattaatccc tatcatagct ctcatggtgt atagatgcgc acctccacca   900
158 tcgtcacagt ttggtcctct tggcatgtgg ggacaacgaa attttaatgc tgatgtttgt   960
160 atggatcctg agcccatagt gcgtatcgta ggtcgaaatg gtctatgtgt tgatgttagg  1020
162 gatggaagat tccacaacgg aaacgcaata cagttgtggc catgcaagtc taatacagat  1080
164 gcaaatcagc tctggacttt gaaaagagac aatactattc gatctaatgg aaagtgttta  1140
166 actacttacg ggtacagtcc gggagtctat gtgatgatct atgattgcaa tactgctgca  1200
168 actgatgcca cccgctggca aatatgggat aatggaacca tcataaatcc cagatctagt  1260
170 ctagttttag cagcgacatc agggaacagt ggtaccacac ttacagtgca aaccaacatt  1320
172 tatgccgtta gtcaaggttg gcttcctact aataatacac aacctttgt tacaaccatt  1380
174 gttgggctat atggtctgtg cttgcaagca aatagtggac aagtatggat agaggactgt  1440
176 agcagtgaaa aggctgaaca acagtgggct ctttatgcag atggttcaat acgtcctcag  1500
178 caaaaccgag ataattgcct tacaagtgat tctaatatac gggaaacagt tgttaagatc  1560
180 ctctcttgtg gccctgcatc ctctggccaa cgatgatgt tcaagaatga tggaaccatt  1620
182 ttaaatttgt atagtgggtt ggtgttagat gtgaggcgat cggatccgag ccttaaacaa  1680
184 atcattcttt accctctcca tggtgaccca aaccaaatat ggttaccatt attttgatag  1740
186 acagattact ctcttgcagt gtgtgtgtcc tgccatgaaa atagatggct aaataaaaaa  1800
188 ggacattgta aattttgtaa ctgaaaggac agcaagttat atcgaattcc tgcag        1855
191 <210> SEQ ID NO: 6
193 <211> LENGTH: 29
195 <212> TYPE: PRT
197 <213> ORGANISM: Ricinus communis
201 <400> SEQUENCE: 6
203 Cys Ala Pro Pro Pro Ser Ser Gln Phe Ser Leu Leu Ile Arg Pro Val
204 1               5                   10                  15
207 Val Pro Asn Phe Asn Ala Asp Val Cys Met Asp Pro Glu
208                 20                  25
```

211 <210> SEQ ID NO: 7
213 <211> LENGTH: 29
215 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
223 <223> OTHER INFORMATION: PAP301(MMP-9) linker
225 <400> SEQUENCE: 7
227 Cys Ala Pro Pro Pro Ser Ser Gln Phe Gly Pro Leu Gly Met Trp Gly
228 1   5   10   15
231 Gln Arg Asn Phe Asn Ala Asp Val Cys Met Asp Pro Glu
232   20   25
235 <210> SEQ ID NO: 8
237 <211> LENGTH: 24
239 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
247 <223> OTHER INFORMATION: primer 302-3'
249 <400> SEQUENCE: 8
250 gggcagtgta tggatcctga gccc   24
253 <210> SEQ ID NO: 9
255 <211> LENGTH: 105
257 <212> TYPE: DNA
259 <213> ORGANISM: Ricinus communis
263 <400> SEQUENCE: 9
264 ctcatggtgt atagatgcgc acctccacca tcgtcacagt tttctttgct tataaggcca   60
266 gtggtaccaa attttaatgc tgatgtttgt atggatcctg agccc   105
269 <210> SEQ ID NO: 10
271 <211> LENGTH: 30
273 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
281 <223> OTHER INFORMATION: primer 302-5'
283 <400> SEQUENCE: 10
284 tgcaattcct tgcggagaaa actgtgacga   30
287 <210> SEQ ID NO: 11
289 <211> LENGTH: 48
291 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
297 <220> FEATURE:
299 <223> OTHER INFORMATION: pAP302(MMP-9) linker
301 <400> SEQUENCE: 11
302 gcacctccac catcgtcaca gttttctccg caaggaattg cagggcag   48
305 <210> SEQ ID NO: 12
307 <211> LENGTH: 1834
309 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
317 <223> OTHER INFORMATION: pAP302
319 <400> SEQUENCE: 12

RAW SEQUENCE LISTING   DATE: 11/12/2002
PATENT APPLICATION: US/10/089,058   TIME: 18:20:44

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\11122002\J089058.raw

```
320 gaattcatga aaccgggagg aaatactatt gtaatatgga tgtatgcagt ggcaacatgg     60
322 ctttgttttg gatccacctc agggtggtct ttcacattag aggataacaa catattcccc    120
324 aaacaatacc caattataaa ctttaccaca gcgggtgcca ctgtgcaaag ctacacaaac    180
326 tttatcagag ctgttcgcgg tcgtttaaca actggagctg atgtgagaca tgaaatacca    240
328 gtgttgccaa acagagttgg tttgcctata aaccaacggt ttattttagt tgaactctca    300
330 aatcatgcag agctttctgt tacattagcg ctggatgtca ccaatgcata tgtggtcggc    360
332 taccgtgctg gaaatagcgc atatttcttt catcctgaca atcaggaaga tgcagaagca    420
334 atcactcatc ttttcactga tgttcaaaat cgatatacat tcgcctttgg tggtaattat    480
336 gatagacttg aacaacttgc tggtaatctg agagaaaata tcgagttggg aaatggtcca    540
338 ctagaggagg ctatctcagc gctttattat tacagtactg gtggcactca gcttccaact    600
340 ctggctcgtt cctttataat ttgcatccaa atgatttcag aagcagcaag attccaatat    660
342 attgagggag aaatgcgcac gagaattagg tacaaccgga gatctgcacc agatcctagc    720
344 gtaattacac ttgagaatag ttggggagga ctttccactg caattcaaga gtctaaccaa    780
346 ggagcctttg ctagtccaat tcaactgcaa agacgtaatg gttccaaatt cagtgtgtac    840
348 gatgtgagta tattaatccc tatcatagct ctcatggtgt atagatgcgc acctccacca    900
350 tcgtcacagt tttctccgca aggaattgca gggcagtgta tggatcctga gcccatagtg    960
352 cgtatcgtag gtcgaaatgg tctatgtgtt gatgttaggg atggaagatt ccacaacgga   1020
354 aacgcaatac agttgtggcc atgcaagtct aatacagatg caaatcagct ctggactttg   1080
356 aaaagagaca atactattcg atctaatgga aagtgtttaa ctacttacgg gtacagtccg   1140
358 ggagtctatg tgatgatcta tgattgcaat actgctgcaa ctgatgccac ccgctggcaa   1200
360 atatgggata atggaaccat cataaatccc agatctagtc tagtttttagc agcgacatca   1260
362 gggaacagtg gtaccacact tacagtgcaa accaacattt atgccgttag tcaaggttgg   1320
364 cttcctacta ataatacaca accttttgtt acaaccattg ttgggctata tggtctgtgc   1380
366 ttgcaagcaa atagtggaca agtatggata gaggactgta gcagtgaaaa ggctgaacaa   1440
368 cagtgggctc tttatgcaga tggttcaata cgtcctcagc aaaaccgaga taattgcctt   1500
370 acaagtgatt ctaatatacg ggaaacagtt gttaagatcc tctcttgtgg ccctgcatcc   1560
372 tctggccaac gatggatgtt caagaatgat ggaaccattt aaatttgta tagtgggttg   1620
374 gtgttagatg tgaggcgatc ggatccgagc cttaaacaaa tcattcttta ccctctccat   1680
376 ggtgacccaa accaaatatg gttaccatta ttttgataga cagattactc tcttgcagtg   1740
378 tgtgtgtcct gccatgaaaa tagatggctt aaataaaaag gacattgtaa attttgtaac   1800
380 tgaaaggaca gcaagttata tcgaattcct gcag                                 1834
```

383 <210> SEQ ID NO: 13
385 <211> LENGTH: 29
387 <212> TYPE: PRT
389 <213> ORGANISM: Ricinus communis
393 <400> SEQUENCE: 13
395 Cys Ala Pro Pro Pro Ser Ser Gln Phe Ser Leu Leu Ile Arg Pro Val
396 1   5   10   15
399 Val Pro Asn Phe Asn Ala Asp Val Cys Met Asp Pro Glu
400   20   25
403 <210> SEQ ID NO: 14
405 <211> LENGTH: 22
407 <212> TYPE: PRT
409 <213> ORGANISM: Artificial Sequence
413 <220> FEATURE:
415 <223> OTHER INFORMATION: PAP302(MMP-9) linker
417 <400> SEQUENCE: 14
419 Cys Ala Pro Pro Pro Ser Ser Gln Phe Ser Pro Gln Gly Ile Ala Gly
420 1   5   10   15

```
423 Gln Cys Met Asp Pro Glu
424           20
427 <210> SEQ ID NO: 15
429 <211> LENGTH: 24
431 <212> TYPE: DNA
433 <213> ORGANISM: Artificial Sequence
437 <220> FEATURE:
439 <223> OTHER INFORMATION: primer 303-3'
441 <400> SEQUENCE: 15
442 gggcagcgaa attttaatgc tgat                                    24
445 <210> SEQ ID NO: 16
447 <211> LENGTH: 105
449 <212> TYPE: DNA
451 <213> ORGANISM: Ricinus communis
455 <400> SEQUENCE: 16
456 ctcatggtgt atagatgcgc acctccacca tcgtcacagt tttctttgct tataaggcca   60
458 gtggtaccaa attttaatgc tgatgtttgt atggatcctg agccc              105
461 <210> SEQ ID NO: 17
463 <211> LENGTH: 36
465 <212> TYPE: DNA
467 <213> ORGANISM: Artificial Sequence
471 <220> FEATURE:
473 <223> OTHER INFORMATION: primer 303-5'
475 <400> SEQUENCE: 17
476 tgcaattcct tgcggagagc atctatacac catgag                       36
479 <210> SEQ ID NO: 18
481 <211> LENGTH: 45
483 <212> TYPE: DNA
485 <213> ORGANISM: Artificial Sequence
489 <220> FEATURE:
491 <223> OTHER INFORMATION: pAP303 (MMP-1) linker
493 <400> SEQUENCE: 18
494 tctccgcaag gaattgcagg gcagcgaaat tttaatgctg atgtt              45
497 <210> SEQ ID NO: 19
499 <211> LENGTH: 1831
501 <212> TYPE: DNA
503 <213> ORGANISM: Artificial Sequence
507 <220> FEATURE:
509 <223> OTHER INFORMATION: pAP303
511 <400> SEQUENCE: 19
512 gaattcatga aaccgggagg aaatactatt gtaatatgga tgtatgcagt ggcaacatgg   60
514 ctttgttttg gatccacctc agggtggtct ttcacattag aggataacaa catattcccc  120
516 aaacaatacc caattataaa ctttaccaca gcgggtgcca ctgtgcaaag ctacacaaac  180
518 tttatcagag ctgttcgcgg tcgtttaaca actggagctg atgtgagaca tgaaatacca  240
520 gtgttgccaa acagagttgg tttgcctata aaccaacggt ttattttagt tgaactctca  300
522 aatcatgcag agctttctgt tacattagcg ctggatgtca ccaatgcata tgtggtcggc  360
524 taccgtgctg gaaatagcgc atatttcttt catcctgaca atcaggaaga tgcagaagca  420
526 atcactcatc ttttcactga tgttcaaaat cgatatacat tcgcctttgg tggtaattat  480
528 gatagacttg aacaacttgc tggtaatctg agagaaaata tcgagttggg aaatggtcca  540
```

VERIFICATION SUMMARY   DATE: 11/12/2002
PATENT APPLICATION: **US/10/089,058**   TIME: 18:20:45

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\11122002\J089058.raw**

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date